

I CLAIM:

1. A magnetic resonance device comprising a hollow having an inner boundary surface, a gradient coil system having an outer boundary surface, said gradient coil system being arranged in the hollow with an interval space between the inner boundary surface of the hollow and an outer boundary surface of the gradient coil system; and at least one flexible hollow body being arranged between the inner boundary surface and the outer boundary surface and being connected to means for adjusting the internal pressure so that the interval space can be sealed.

2. A magnetic resonance device according to claim 1, wherein the hollow body is constructed so that the interval space is sealed gas-tight.

3. A magnetic resonance device according to claim 2, wherein the hollow body is constructed to attach the gradient coil system in the hollow.

4. A magnetic resonance device according to claim 3, wherein a cavity of the hollow body is connected with a pressure control unit to control the inner pressure of the hollow body.

5. A magnetic resonance device according to claim 4, wherein the hollow body is constructed of an elastic material.

6. A magnetic resonance device according to claim 5, wherein the elastic material is rubber.

7. A magnetic resonance device according to claim 1, wherein means for adjusting the internal pressure in the hollow body includes introducing a pressure medium into the hollow body.

8. A magnetic resonance device according to claim 7, wherein the pressure medium is air.

9. A magnetic resonance device according to claim 1, wherein the hollow body is constructed as an annular tube.

10. A magnetic resonance device according to claim 1, which includes an antenna system being arranged in an inner hollow surface of the gradient coil system with an outer surface of the antenna system being spaced from the inner surface of the gradient coil system and at least one additional hollow body being arranged between the outer surface of the antenna system and the inner surface of the gradient coil system.

11. A magnetic resonance device according to claim 10, wherein at least one of the hollows is constructed as a cylindrical hollow.

12. A magnetic resonance device according to claim 11, wherein at least one of the hollows has two opposite openings.

13. A magnetic resonance device according to claim 10, wherein one of the gradient coil system and the antenna system is constructed as a hollow cylindrical body member.

14. A magnetic resonance device according to claim 1, wherein the hollow body attaches the gradient coil system in the inner surface of the hollow.

15. A magnetic resonance device according to claim 1, wherein the cavity of the hollow body is connected with a pressure control unit to control the internal pressure.

16. A magnetic resonance device according to claim 1, wherein the hollow body is constructed from an elastic material.

17. A magnetic resonance device according to claim 16, wherein the elastic material is rubber.